

Title (en)

MONOPOLE FIELD ELECTRIC MOTOR-GENERATOR WITH SWITCHABLE COIL CONFIGURATION

Title (de)

ELEKTRISCHER MOTOR-GENERATOR MIT MONOPOLFELD MIT UMSCHALTBARER SPULENKONFIGURATION

Title (fr)

GENERATRICE ET MOTEUR ELECTRIQUE A CHAMP UNIPOLAIRE A CONFIGURATION DE BOBINE COMMUTABLE

Publication

**EP 1925070 A2 20080528 (EN)**

Application

**EP 06735831 A 20060221**

Priority

- US 2006006327 W 20060221
- US 21004405 A 20050822

Abstract (en)

[origin: US2006038460A1] A pair of stators produce a magnetic field within a space between them. a ferromagnetic toroidal rotor is rotationally mounted within the magnetic field. A plurality of windings are wound radially on the rotor and each winding provides a plurality of coils. Each of coils is interconnected through a switch, the switch configured for placing each of the coils within each winding alternatively in one of an electrical series connection, an electrical parallel connection, and an electrically isolated connection, so that when operated as a generator, a selected output voltage and current are produced by rotor rotation and when operated as a motor a selected output speed and torque are produced.

IPC 8 full level

**H02K 21/12** (2006.01); **H02K 1/22** (2006.01); **H02K 3/28** (2006.01); **H02K 19/00** (2006.01); **H02K 21/24** (2006.01); **H02P 29/00** (2016.01); **H02P 29/20** (2016.01)

CPC (source: EP KR US)

**H02K 1/22** (2013.01 - KR); **H02K 3/28** (2013.01 - EP US); **H02K 21/24** (2013.01 - EP KR US); **H02K 21/26** (2013.01 - EP US); **H02K 21/48** (2013.01 - EP US); **H02K 23/54** (2013.01 - EP US); **H02K 23/64** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**US 2006038460 A1 20060223**; **US 7348703 B2 20080325**; BR PI0615474 A2 20110517; BR PI0615474 B1 20180130; CA 2617921 A1 20070301; CN 101248573 A 20080820; CN 101248573 B 20130109; EA 011799 B1 20090630; EA 200800629 A1 20080630; EP 1925070 A2 20080528; EP 1925070 A4 20101222; EP 1925070 B1 20150701; ES 2546961 T3 20150930; JP 2009505630 A 20090205; KR 101192483 B1 20121017; KR 20080045222 A 20080522; MX 2008001721 A 20080407; WO 2007024262 A2 20070301; WO 2007024262 A3 20070419

DOCDB simple family (application)

**US 21004405 A 20050822**; BR PI0615474 A 20060221; CA 2617921 A 20060221; CN 200680030768 A 20060221; EA 200800629 A 20060221; EP 06735831 A 20060221; ES 06735831 T 20060221; JP 2008527893 A 20060221; KR 20087006630 A 20060221; MX 2008001721 A 20060221; US 2006006327 W 20060221